



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2023-1040; Project Identifier MCAI-2022-01512-T]

RIN 2120-AA64

Airworthiness Directives; MHI RJ Aviation ULC (Type Certificate Previously Held by Bombardier, Inc.) Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for all MHI RJ Aviation ULC Model CL-600-2C10 (Regional Jet Series 700, 701 & 702), CL-600-2D15 (Regional Jet Series 705), CL-600-2D24 (Regional Jet Series 900), and CL-600-2E25 (Regional Jet Series 1000) airplanes. This proposed AD was prompted by a manufacturing quality escape concerning the installation of the Halon metering device on certain cargo fire extinguisher containers. This proposed AD would require the inspection of cargo fire extinguisher container serial numbers and the replacement of the affected containers. This proposed AD would also limit the installation of affected parts. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to [regulations.gov](https://www.regulations.gov). Follow the instructions for submitting comments.
- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1040; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The street address for Docket Operations is listed above.

Material Incorporated by Reference:

- For service information identified in this NPRM, contact MHI RJ Aviation Group, Customer Response Center, 3655 Ave. des Grandes-Tourelles, Suite 110, Boisbriand, Québec J7H 0E2 Canada; North America toll-free telephone 833-990-7272 or direct-dial telephone 450-990-7272; fax 514-855-8501; email thd.crj@mhirj.com; website [mhirj.com](https://www.mhirj.com).

- You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

FOR FURTHER INFORMATION CONTACT: Chirayu Gupta, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email 9-avs-nyaco-cos@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2023-1040; Project Identifier MCAI-2022-01512-T” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend the proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Chirayu Gupta, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590;

telephone 516-228-7300; email 9-avs-nyaco-cos@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

Transport Canada, which is the aviation authority for Canada, has issued AD CF-2022-66, dated December 8, 2022 (also referred to after this as the MCAI), to correct an unsafe condition on all MHI RJ Aviation ULC Model CL-600-2C10 (Regional Jet Series 700, 701 & 702), CL-600-2D15 (Regional Jet Series 705), CL-600-2D24 (Regional Jet Series 900), and CL-600-2E25 (Regional Jet Series 1000) airplanes. The MCAI states that during assembly of the Halon metering device, the discharge head was not fully seated on cargo fire extinguisher containers having certain serial numbers. The threads in the discharge neck were not re-tapped after the discharge disc was welded resulting in an undersized thread, which prevented the Halon metering device from being fully seated. This will result in an increased Halon mass flow rate through the metering device during discharge, which could reduce the duration of the Halon flow. This condition, if not corrected, when combined with a cargo fire, could lead to a reduction in the fire extinguishing capabilities of the fire protection system.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1040.

Related Service Information Under 1 CFR Part 51

The FAA reviewed MHIRJ Service Bulletin 670BA-26-014, dated July 28, 2022. This service information specifies procedures for an inspection for the serial numbers of the high rate of discharge (HRD) and low rate of discharge (LRD) cargo fire extinguisher containers and the replacement of affected cargo fire extinguisher containers.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI described above. The FAA is issuing this NPRM after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

Proposed AD Requirements in this NPRM

This proposed AD would require accomplishing the actions specified in the service information already described. This proposed AD would also limit the installation of affected parts.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 597 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

Estimated costs for required actions

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Up to 1 work-hour X \$85 per hour = \$85	\$0	Up to \$85	Up to \$50,745

Estimated costs of on-condition actions

Labor cost	Parts cost	Cost per product
3 work-hours X \$85 per hour = \$255	\$0	\$255

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some or all of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected operators.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and
- (3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

MHI RJ Aviation ULC (Type Certificate Previously Held by Bombardier, Inc.):

Docket No. FAA-2023-1040; Project Identifier MCAI-2022-01512-T.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all MHI RJ Aviation ULC (type certificate previously held by Bombardier Inc.) airplanes, certificated in any category, identified in paragraphs (c)(1) through (5) of this AD.

(1) Model CL-600-2C10 (Regional Jet Series 700, 701 & 702) airplanes.

(2) Model CL-600-2C11 (Regional Jet Series 550) airplanes.

(3) Model CL-600-2D15 (Regional Jet Series 705) airplanes.

(4) Model CL-600-2D24 (Regional Jet Series 900) airplanes.

(5) Model CL-600-2E25 (Regional Jet Series 1000) airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 26, Fire Protection.

(e) Unsafe Condition

This AD was prompted by a manufacturing quality escape concerning the installation of the Halon metering device on certain cargo fire extinguisher containers. The FAA is issuing this AD to address an increased Halon mass flow rate through the metering device during discharge, which could reduce the duration of the Halon flow. The unsafe condition, if not addressed, when combined with a cargo fire, could lead to a reduction in the fire extinguishing and suppression capabilities of the fire protection system.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspection and Replacement

Within 1,000 flight hours or 6 months, whichever occurs first from the effective date of this AD, inspect the serial numbers of the high rate of discharge (HRD) and low rate of discharge (LRD) cargo fire extinguisher containers in accordance with Section 2.B. of the Accomplishment Instructions of MHIRJ Service Bulletin 670BA-26-014, dated July 28, 2022. A review of airplane maintenance records is acceptable in lieu of this inspection if the serial number of the HRD and LRD cargo fire extinguisher containers can be conclusively determined from that review.

(1) If neither of the HRD or the LRD container serial numbers is listed in Section 2.B. of the Accomplishment Instructions of MHIRJ Service Bulletin 670BA-26-014, dated July 28, 2022, no further work is required by this paragraph.

(2) If the serial numbers of both the HRD and LRD containers are listed in Section 2.B. of the Accomplishment Instructions of MHIRJ Service Bulletin 670BA-26-

014, dated July 28, 2022: Within 4,500 flight hours from the effective date of this AD, replace the HRD and LRD cargo fire extinguisher containers in accordance with Section 2.B. of the Accomplishment Instructions of the MHIRJ Service Bulletin 670BA-26-014, dated July 28, 2022.

(3) If the serial number of either the HRD or the LRD container, but not both, is listed in Section 2.B. of the Accomplishment Instructions of MHIRJ Service Bulletin 670BA-26-014, dated July 28, 2022: Within 8,800 flight hours from the effective date of this AD, replace the affected HRD or LRD cargo fire extinguisher container in accordance with Section 2.B. of the Accomplishment Instructions of MHIRJ Service Bulletin 670BA-26-014, dated July 28, 2022.

(h) Parts Installation Limitation

As of the effective date of this AD, it is prohibited to install an HRD or LRD cargo fire extinguisher container with a serial number listed in Section 2.B. of the Accomplishment Instructions of MHIRJ Service Bulletin 670BA-26-014, dated July 28, 2022, unless the cargo fire extinguisher container is ink-stamped with a circled “G” adjacent to the nameplate, signifying the incorporation of Kidde Service Bulletin Fire Extinguisher-26-A dated April 4, 2022.

(i) Additional AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the New York ACO Branch, mail it to ATTN: Program Manager, Continuing Operational Safety, at the address identified in paragraph (j)(2) of this AD or email to: 9-avs-nyaco-cos@faa.gov. If mailing

information, also submit information by email. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer:* For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada or MHI RJ Aviation ULC's Transport Canada Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(j) Additional Information

(1) Refer to Transport Canada AD CF-2022-66, dated December 8, 2022, for related information. This Transport Canada AD may be found in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1040.

(2) For more information about this AD, contact Chirayu Gupta, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email 9-avs-nyaco-cos@faa.gov.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) MHIRJ Service Bulletin 670BA-26-014, dated July 28, 2022.

(ii) [Reserved].

(3) For service information identified in this AD, contact MHI RJ Aviation Group, Customer Response Center, 3655 Ave. des Grandes-Tourelles, Suite 110,

Boisbriand, Québec J7H 0E2 Canada; North America toll-free telephone 833-990-7272 or direct-dial telephone 450-990-7272; fax 514-855-8501; email thd.crj@mhjr.com; website mhjr.com.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on May 8, 2023.

Michael Linegang, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2023-10203 Filed: 5/11/2023 8:45 am; Publication Date: 5/12/2023]